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## RESEARCH ARTICLE

### Psychological Trauma and Breastfeeding: What We Know So Far

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#### ABSTRACT

**Introduction:** Childhood and adult trauma are common experiences in perinatal women worldwide. Psychological trauma has a well-documented effect on mothers' mental health, but less is known about its impact on breastfeeding.

**Objectives:** This article synthesizes the results from recent studies on trauma on breastfeeding and perinatal mental health. I describe possible mechanisms by which trauma influences breastfeeding and mental health and provide practical suggestions for working effectively with this population.

**Method:** Studies were identified via searches in PubMed and PsychInfo. Key words were adverse childhood experiences, child abuse, child maltreatment, intimate partner violence, birth trauma, pregnancy, postpartum, breastfeeding, postpartum depression, postpartum anxiety, and posttraumatic stress disorder (PTSD). Preference was given to studies published in the past 5 years, but older studies were included if more recent studies were not available. Review articles were also included.

**Results:** Psychological trauma can affect anyone regardless of income, religion, country of origin, age, or race and ethnicity. Pregnant and postpartum women are no exception. Traumatic experiences can make breastfeeding more difficult, but it is often an important goal for trauma survivors. Some studies have found that trauma survivors are *more* likely to breastfeed. Breastfeeding may be particularly important for trauma survivors in that it lessens trauma symptoms, improves mental health, and lowers the risk of mothers maltreating their children. When working with trauma survivors, it is important that practitioners avoid making assumptions that mothers will not breastfeed. It is important to support their breastfeeding goals.

**Clinical Implications:** Providers who work with new mothers will likely encounter a substantial percentage who are trauma survivors. Trauma survivors may not share their stories with providers, even if they directly ask, but these mothers' experiences can influence both breastfeeding and their mental health. Practitioners who understand trauma and support breastfeeding in a trauma-informed way can positively influence both breastfeeding and mental health outcomes. Both childhood and adult trauma can have a negative effect on breastfeeding, but the mechanism may vary. Recent trauma can directly impact hormones needed for breastfeeding whereas childhood trauma may impact it via trauma sequelae, such as depression, anxiety, and PTSD.

**Keywords:** psychological trauma, breastfeeding, adverse childhood experiences, intimate partner violence, birth trauma, postpartum depression, postpartum anxiety, posttraumatic stress disorder

## Introduction

Trauma is a common experience among perinatal women and can happen to either children or adults. In one sample of 1,581 pregnant women in the U.S., 93% reported that they had experienced at least one lifetime traumatic event, 36% experienced interpersonal violence, and 25% reported common trauma sequelae such as depression, anxiety, or PTSD <sup>1</sup>. Interpersonal violence is a common and pernicious form of trauma for perinatal women. Many believe that only lower-income women are affected. This belief is inaccurate. A study from Boston compared pregnant women from the inner city to those living in an affluent suburb. The rate of interpersonal violence was higher in the inner city (59%), but surprisingly similar in the affluent suburb (47%) <sup>2</sup>.

## What Is a Traumatic Event?

Trauma is a word that has both a colloquial and clinical meaning. Colloquially, it's a synonym for almost any negative experience. Clinically, its meaning is more precise. Psychological trauma is defined by two classifications: the *Diagnostic and Statistical Manual, 5<sup>th</sup> Edition* (DSM-5), or the World Health Organization's *International Classification of Disease, 11<sup>th</sup> Edition* (ICD-11).

## Diagnostic and Statistical Manual, 5<sup>th</sup> Edition

The DSM-5 PTSD guidelines (Criterion A) defines a traumatic event as death or threatened death, actual or threatened serious injury, or actual or threatened sexual violation <sup>3</sup>. These events can

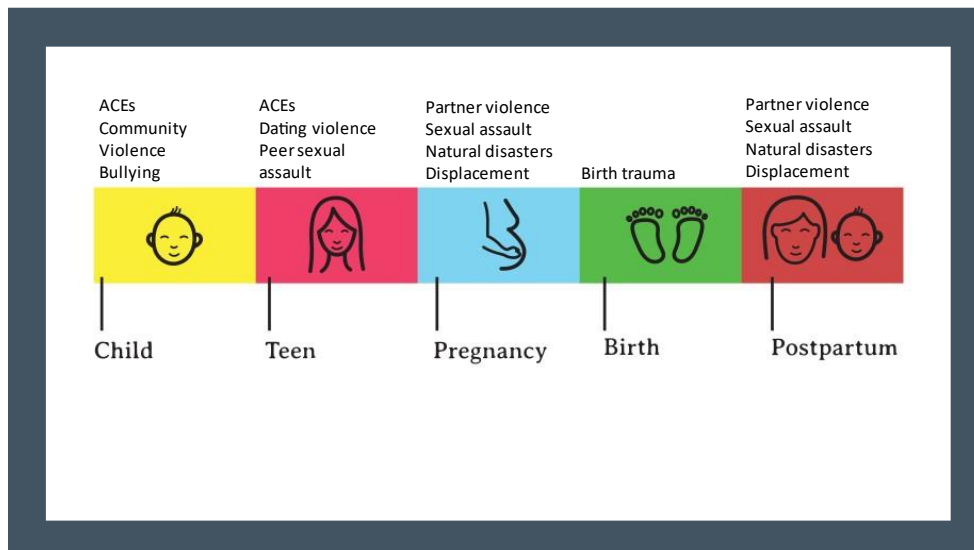
be experienced directly, witnessed, or it could have happened to a close friend or relative. Someone who has experienced a Criterion A-level stress, must also have symptoms in four clusters (re-experiencing, avoidance, changes in mood and cognitions, and changes in reactivity and arousal) to meet criteria for PTSD. The symptoms must persist for at least one month and must cause significant impairment in daily functioning. Even if a person does not meet the full criteria, they can have trauma symptoms that impair daily life. They may also have other sequelae, such as depression or anxiety.

## International Classification of Diseases, 11<sup>th</sup> Edition

The International Classification of Diseases-11 (ICD-11) criteria for PTSD includes many of the same points but is less specific. The event criterion is more general ("exposure to a threatening or horrific event or series of events"). "Horrorific and threatening" are not defined. These criteria also include re-experiencing symptoms, avoidance, hypervigilance, and symptoms lasting for several weeks <sup>4</sup>.

## Developmental Stages and Trauma

Figure 1 lists types of trauma that can occur during various developmental stages for pregnant and postpartum women. This review focuses on the three common types of trauma in perinatal women: adverse childhood experiences (ACEs), intimate partner violence (IPV), and birth trauma. These types of have been studied more frequently. Literature on the other types is sparse but emerging.



**Figure 1** A listing of trauma types more likely to occur at each developmental stage for perinatal women—ACEs=adverse childhood experiences. Figure credit: Ken Tackett

## Childhood Trauma and Adverse Childhood Experiences (ACEs)

Adverse childhood experiences (ACEs) include a range of adversities in childhood: physical and sexual abuse; emotional abuse; neglect (physical and emotional); witnessing parental intimate partner violence; parental mental illness, substance abuse, and criminal activity. These effects are additive. The more types of experiences people have had in childhood, the higher their ACE score, which can lead to potentially worse outcomes as adults <sup>5</sup>.

Adverse Childhood Experiences (ACEs) were first identified in the Adverse Childhood Experiences Study, which included more than 17,000 patients in the Kaiser Permanente system, a health maintenance organization in San Diego, California. In this middle-class, middle-age sample, 51 percent of patients had experienced at least one ACE <sup>6</sup>. Participants who had experienced 4 or more ACEs had an increased risk of serious diseases, such as cardiovascular disease, diabetes, cancer, and overall premature mortality. It was a landmark study in that it was the first that linked childhood abuse to adult organic disease. Subsequent studies have linked ACEs to many other conditions, such as sleep disturbances and chronic pain syndromes <sup>7</sup>.

Adverse Childhood Experiences also resulted in increased chronic activation of the inflammatory response system. Data from the Collaborative Perinatal Project, which enrolled pregnant women from 1959 to 1972, found that both prenatal and childhood adversity increased inflammation in the offspring when they had mean age of 42 <sup>8</sup>. In fact, prenatal adversity increased inflammation (C-reactive protein) in the adult offspring by 3 times.

In the Dunedin Multidisciplinary Health and Development Study, a birth cohort study from Dunedin, New Zealand, childhood maltreatment was related to increased inflammation (C-reactive protein) 20 years later. There was a dose-response effect: the more severe the abuse, the higher the adult inflammation <sup>9</sup>. At the 32-year assessment in this same study, those who experienced childhood adversities (low socioeconomic status, maltreatment, or social isolation) had higher rates of major depression, systemic inflammation, and at least three metabolic risk markers <sup>10</sup>. The results of these studies are relevant because they demonstrate that traumatic experiences, even from childhood, chronically activate the stress system, which increases their risk for both depression and difficulties breastfeeding.

## Sequelae of ACEs in the Perinatal Period

Depression is the most common sequela of ACEs in the perinatal period, but ACEs also increased the risk of anxiety and PTSD. A review of 43 studies found that women who were either abused as children, or by their partners, had more lifetime depression and depression during pregnancy and postpartum. When women experienced both child abuse and partner violence, they had more severe depression <sup>11</sup>.

Seng and colleagues' <sup>12</sup> study included 566 mothers. There were three groups: those who currently had PTSD, those who were trauma-exposed but had no symptoms (resilient), and those with no trauma exposure. They found that childhood abuse was the strongest predictor of PTSD and that both postpartum depression and PTSD impaired mother-infant bonding.

## The Impact of ACEs on Breastfeeding Initiation and Duration

Findings are mixed regarding whether ACEs negatively affect breastfeeding initiation or duration: some show no effect while others find decreased breastfeeding rates. Two early studies demonstrated that women with histories of childhood sexual abuse had *higher* rates of both intentions to breastfeed and breastfeeding initiation. The first study included low-income Black women in Baltimore <sup>13</sup>. The second included a nationally representative sample of U.S. mothers of children under the age of 3 <sup>14</sup>. Data from the Survey of Mothers' Sleep and Fatigue, with a sample of 6,410 new mothers from 59 countries (994 of whom were sexual assault survivors), found that exclusive breastfeeding rates were the same for women with a history of sexual assault and non-assaulted women: both at 78% <sup>15</sup>.

A study of 3,778 women from the 1973-1978 cohort of Australian Longitudinal Study on Women's Health found that 15.5% reported a history of child sexual abuse <sup>16</sup>. Their initial analysis found that sexual abuse survivors were less likely to breastfeed. However, once they controlled for demographic factors, they found no difference between the groups. The authors concluded that the rates were similar for the abused vs. non-abused women.

A study of women from the 2011-2012 Canadian Community Health Survey (n=697 and n=633) found that ACEs were not related to breastfeeding initiation after controlling for education <sup>17</sup>. The authors did find, however, that women with histories of ACEs were less likely to exclusively breastfeed.

The largest sample was from the

Norwegian Mother and Child Cohort Study (N=53,934)<sup>18</sup>. In this sample, 19% reported adult abuse, and 18% reported child abuse. Their study outcome variable was breastfeeding cessation before 4 months. The authors found that breastfeeding cessation was strongly associated with both childhood and adult abuse. Breastfeeding cessation was 22% more likely if women experienced childhood sexual violence, 41% more likely if they experienced one or more types of violence, 40% more likely if they experienced violence in the past 12 months, and 28% more likely if the perpetrator is known to them.

### Adult Trauma

Mothers may also experience trauma as adults. This section describes two common types of adult trauma: intimate partner violence and birth trauma. Partner violence may be ongoing. Not surprisingly, both types have a pervasive negative effect on both breastfeeding and mental health.

### Intimate Partner Violence

Intimate partner violence (IPV) is abuse by a partner that can be physical, emotional, sexual, or financial. The partner does not have to live with the victim for it to be considered IPV. Perinatal women who have experienced IPV have higher rates of depression. For example, a study of perinatal Latina women in the U.S. included 92 who reported IPV, and 118 who did not. Forty-four percent of these mothers met criteria for depression. The women were assessed during pregnancy and at 3, 7, and 13 months postpartum<sup>19</sup>. IPV was a stronger predictor of postpartum depression than depression during pregnancy, which has traditionally been the strongest risk factor.

A study of 5,162 pregnant women in Montreal found that 15% reported IPV, which was most common for poorer women<sup>20</sup>. The combination of immigrant status and IPV increased the risk of depression by 7 times. IPV also impacted the mental health status of native-born women and increased their risk of depression by almost 5 times.

### Intimate Partner Violence and Breastfeeding

The findings on whether IPV negatively impacts breastfeeding have also been mixed, but most studies indicate that it negatively affects breastfeeding. One of the original studies found no difference in initiation or duration of breastfeeding between women who experienced IPV and those who did not<sup>21</sup>. However, the sample size for both groups was small (n=10, n=11). A larger study had a surprisingly similar finding. In a sample of 2,621 women from Melbourne, Australia, 6.3% reported

IPV<sup>22</sup>. Breastfeeding rates did not significantly differ between IPV and non-IPV groups.

However, a study of 216 mothers of children 12 to 15 months found that 27% had experienced partner violence<sup>23</sup>. When couples were physically abusive, they were twice as likely to not to breastfeed, five times more likely to use breast-milk substitutes, and 2.7 times more likely to bottle-feed. Similarly, a study of 1,146 pregnant women found that women who experienced violence before or during pregnancy were significantly less likely to breastfeed in the first 12 months<sup>24</sup>.

Mothers from Malawi (n=1,878), Tanzania (n=3,184), and Zambia (n=3,879) participated in Demographic and Health Surveys to examine the link between IPV and breastfeeding outcomes<sup>25</sup>. The rates of breastfeeding initiation the first hour after birth and exclusive breastfeeding were high in all three countries. However, mothers who experienced sexual IPV were more likely to delay breastfeeding initiation and to not exclusively breastfeed. Tanzanian mothers who experienced IPV were 2 times more likely to not breastfeed at 12 months postpartum.

A large population study from 51 low-to-middle-income countries (LMIC), which included between 95,320 and 102,318 mother-infant dyads, found that 33% had experienced IPV (28% physical violence, 8% sexual violence, and 16% emotional violence). Mothers exposed to any type of IPV were less likely to initiate breastfeeding early and breastfeed exclusively for the first 6 months<sup>26</sup>.

In Bangladesh, a study of 2,000 mothers found that 50% had experienced violence in the previous 12 months and that 28% had high levels of "common mental disorders"<sup>27</sup>. Women who experienced IPV were 2 to 2.3 times more likely to have common mental health disorders and 28% to 34% less likely to breastfeed exclusively. The authors note a direct path between violence and breastfeeding cessation and an indirect path, via mental health disorders.

A systematic of 12 studies found that partner violence did lead to lower rates of breastfeeding<sup>28</sup>. Another recent review of 16 studies also found that partner violence lowered breastfeeding, but not all studies were consistent<sup>29</sup>. The authors indicated that many of these studies were of fair to poor quality. They found that 4 of 7 studies found that IPV lowered breastfeeding duration, 5 of 10 found that IPV led to early termination of exclusive breastfeeding, and 2 of 6 studies found that IPV reduced breastfeeding initiation. The lack agreement between these studies

suggests that other factors are involved.

Culture appears to play a role and that is generally not included in studies within the U.S. A study of 760 low-income women from upstate New York found that history of violence led to breastfeeding cessation for White women but had the opposite effect for Black women. Violence increased the likelihood of a breastfeeding plan and initiation for Black women<sup>30</sup>.

### **Birth Trauma**

Women's birth experiences can also affect their mental health. Birth trauma is so pervasive that the World Health Organization issued a statement indicating that women deserved respectful and non-abusive care while in labor<sup>31</sup>. Giving birth in a wealthy country does not necessarily mean lower rates of birth trauma. Indeed, industrialized nations often have higher rates.

### *Incidence*

Most studies of birth trauma used posttraumatic stress disorder as the primary outcome, but depression and anxiety disorders occur at higher rates. For example, in the U.S. Listening to Mothers II Survey, 9 percent of mothers met full criteria for PTSD, and an additional 18 percent of the complete sample scored above the cutoff for PTSD symptoms related to their births<sup>32</sup>. The percentage was even higher for African American mothers: 28% of whom had trauma symptoms<sup>33</sup>. When considering the percentage of women who met full criteria for PTSD, 9% may not seem particularly high, so it is helpful to compare it to another number. In the months following the September 11<sup>th</sup> terrorist attacks, 7.5 percent of residents in lower Manhattan, New York, met the full criteria for PTSD<sup>34</sup>. The sobering fact is that the rate of PTSD after birth in the U.S. was higher than it was following a terrorist attack.

A study from Belgium included 340 mothers at 1-week postpartum and 229 at 6 weeks<sup>35</sup>. They found 4% had PTSD at 6 weeks. At 1 week, 22% to 24% had symptoms, and at 6 weeks, 13% to 20% had symptoms. The rates of birth interventions were somewhat high: 33% were induced, 74% had epidurals, and 22% had cesareans (39% of which were unplanned).

Nine hundred and fifty women from Turkey were assessed during pregnancy, at 4 to 6 weeks and at 6 months postpartum<sup>36</sup>. At 4 to 6 weeks postpartum, 12% met full criteria for PTSD, and 9% met full criteria at 6 months. In addition, a third of the women perceived their birth to be traumatic. Two hundred and six women had delayed symptoms, with no PTSD symptoms at 4 to 6 weeks

postpartum, but 6% met full criteria at 6 months postpartum<sup>37</sup>.

A study of 933 mothers in Brisbane, Australia, showed similar rates<sup>38</sup>. At 6 weeks postpartum, 6.3 percent of participants met the full criteria for PTSD, and 46 percent described their birth as traumatic. Although the PTSD rate was lower than in the U.S., the mothers in this study had high rates of depression (47 to 66 percent) and anxiety (58 to 74 percent). This finding is consistent with the trauma literature, which shows that not everyone exposed to a traumatic event develops PTSD, but they may show other symptoms, such as depression and anxiety<sup>39</sup>.

Some argue that birth trauma is inevitable because birth is difficult and that model of care (midwifery vs. obstetric) makes no difference. However, we can examine the effect of the model of care by looking at studies of women in countries where birth is treated as a normal event and who have continuous labor support (midwifery model). In these studies, women have lower rates of PTSD. For example, a prospective study of 1,224 women in Sweden found that 1.3 percent had birth-related PTSD, and 9 percent described their births as traumatic<sup>40</sup>. Similarly, a study of 907 women in the Netherlands found that 1.2 percent of women had birth-related PTSD, and 9 percent identified their births as traumatic<sup>41</sup>. Interestingly, maternity care providers also have lower rates of PTSD and secondary trauma in these same countries that use a midwifery model of care<sup>42</sup>.

Conversely, in countries, such as the U.S., where the obstetric model predominates, the rate of birth trauma is higher<sup>32</sup>. Further, women who give birth in countries where the status of women is generally low have higher rates of birth trauma. For example, a study from Iran of 400 women found that 55% of participants reported traumatic births at 6 to 8 weeks postpartum, and 20 percent had postpartum PTSD<sup>43</sup>.

### **Birth Interventions' Impact on Breastfeeding and Mental Health**

Birth interventions by themselves do not, necessarily, lead to birth trauma. But they can cause downstream negative effects for both breastfeeding and mental health. For example, mothers who had unassisted vaginal births had the highest rates of exclusive breastfeeding (83%) in a survey of 6,410 mothers with infants 0-12 months old. Rates of exclusive breastfeeding ranged from 69% to 71% for all other types of birth<sup>44</sup>. A study of 5,332 mothers in the UK found more breastfeeding problems at 3 months postpartum following forceps-assisted and unplanned cesarean

births<sup>45</sup>.

Epidurals have also been a source of controversy, with some providers insisting that they have no negative effects while others have noted both breastfeeding difficulties and increased risk of depression. The findings are mixed. For example, a prospective study of 1,280 Australian mothers found that epidurals were associated with breastfeeding difficulties at 1 week postpartum and cessation at 3 months<sup>46</sup>. In an international study of 6,410 new mothers, epidurals were related to higher rates of depression even after controlling for birth interventions, mothers' history of depression, history of sexual assault, low income or education level, current anxiety, or current anger and irritability<sup>44</sup>. Some studies with small samples, however, have not found that epidurals increased breastfeeding problems<sup>47</sup> or depression<sup>48</sup>.

In qualitative studies, women reported feeling so overwhelmed by their traumatic births that they could not breastfeed and wanted to "get back to their normal selves again"<sup>49</sup>. Conversely, other women reported that breastfeeding was a way to "prove" themselves as mothers. That breastfeeding redeemed their experiences and helped them to not feel like "failures." Unfortunately, if breastfeeding does not work out for them, mothers who have experienced traumatic births may feel even more grief than mothers whose birth was not traumatic<sup>50</sup>.

### **Possible Mechanisms for How Childhood vs. Adult Trauma Impacts Breastfeeding**

Research to date suggests that adverse childhood experiences *can* negatively influence breastfeeding, but do not in every case. In some cases, mothers are *more* likely to breastfeed if they have experienced childhood adversity. Many mothers consider it an important parenting goal. I have also found that to be true in my clinical work. It is important to find out what mothers want to do and proceed from there. It is not helpful when providers tell mothers that they "don't need to worry about breastfeeding" because they are trying to make it easier for them. Mothers may encounter some obstacles, but breastfeeding is fully possible. If mothers want to do it, they need support.

An intriguing question is why breastfeeding is affected for some women but not others. One possible mediator between ACEs and breastfeeding cessation is abuse sequelae. In other words, it may not be ACEs, per se, that cause breastfeeding cessation, but the depression, anxiety, and PTSD that follow in their wake<sup>51-53</sup>. However, there is benefit in breastfeeding even if mothers are currently depressed. Exclusive

breastfeeding lessened depressive symptoms in women who are already depressed in a study of 334 new mothers from Portugal<sup>54</sup>. These findings also suggest that treating depression, anxiety, and PTSD would likely increase breastfeeding rates and improve mothers' overall experiences with breastfeeding. Breastfeeding may also help them feel attached to their babies as Brooke Shields so eloquently described in her memoir of postpartum depression. She described breastfeeding as her emotional connection to her baby and her lifeline to possibly overcoming depression<sup>55</sup>.

As with childhood trauma, intimate partner violence and birth trauma can cause depression, anxiety, and PTSD, which influences breastfeeding initiation and duration, as they do for ACE survivors. In addition, some studies suggest that there may also be some direct physiological changes that can lead to breastfeeding challenges that may be difficult to overcome.

In the case of partner violence, women in violent relationships appear less likely to breastfeed than those who are not experiencing violence. These challenges are understandable, and it is amazing that any woman can successfully breastfeed under these circumstances. For these women, their and their babies' safety must be primary. However, anecdotally, several women who experienced partner violence told me that breastfeeding "saved" them and their children from many of the harmful effects of what they were experiencing. Breastfeeding was where they retreated when things got bad. They did not share how they managed to breastfeed under these circumstances, but they wanted me to know that it had been important to them. To date, no one has studied the hormonal effects of partner violence in breastfeeding mothers, but studies on birth trauma might provide some insight.

To frame this discussion, it is important to know that the stress system and oxytocin system mutually suppress each other. When the stress system is upregulated, it suppresses oxytocin and prolactin, the hormones necessary for milk production and milk-ejection<sup>56,57</sup>. A study from Guatemala found that highly stressful births delayed lactogenesis II (when milk becomes more abundant around day 3 to 4) because high cortisol levels suppressed prolactin<sup>57</sup>. Another study of 63 first-time mothers at 2 days postpartum showed how oxytocin released during skin-to-skin contact specifically lowered both ACTH and cortisol. Suckling released oxytocin in both mother and baby<sup>58</sup>. A study from Germany found that suckling produced a short-term lessening of the stress response and suppressed both ACTH and cortisol<sup>59</sup>.

Examining the hormonal profiles of women who have experienced childhood and adult trauma could help elucidate the role of direct stress-induced suppression of lactation vs. lactation that is hampered because of trauma sequelae, such as depression, anxiety, and PTSD. These findings would have particular relevance for practitioners working with trauma survivors. For women influenced by sequelae, treating depression, anxiety, and PTSD would be most helpful. For women experiencing more recent trauma, strategies that increase oxytocin (such as increased social

support, wanted touch, and warmth) would be the most effective way to downregulate an overactive stress system.<sup>60,61</sup>

### Breastfeeding's Special Protection for Trauma Survivors

Although trauma can make breastfeeding more difficult, breastfeeding offers mothers two protections that may be particularly important: downregulation of the stress system, which attenuates trauma symptoms, and breaking the intergenerational cycle of abuse.



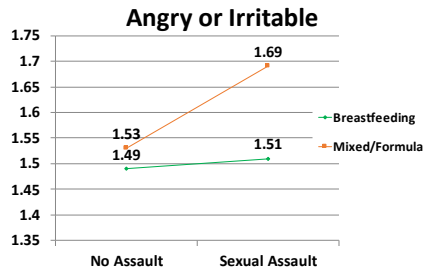
**Figure 2** Breastfeeding can help overcome past trauma, lower the risk of sequelae, and lessen the risk of intergenerational transmission of trauma. Illustration credit: Ken Tackett

### Attenuation of Trauma Symptoms

The first potential benefit for trauma survivors is breastfeeding's effects on trauma symptoms. In a study of 6,410 new mothers, 994 women reported that they had been raped. In a previous analysis with these data, we found that exclusive breastfeeding had a positive impact on mothers' mental health for the entire sample<sup>62</sup>. There was no significant difference between mixed-feeding and exclusive formula-feeding on any of the variables. For subsequent analyses, we combined their two groups: exclusive vs. non-exclusive breastfeeding.

Given the large number of sexual assault survivors in our sample, we wondered if sexual assault survivors would experience similar mental health effects with exclusive breastfeeding that the whole sample experienced. Would breastfeeding be enough to make a difference? Initial bivariate analyses showed that sexual assault had a pervasive negative effect on every measure: sleep, daily well-being, and mental health. When the

feeding method (exclusive vs. non-exclusive breastfeeding) was added to the analyses, exclusive breastfeeding attenuated trauma symptoms for all the variables<sup>15</sup>. Among the sexually assaulted women, those who were exclusively breastfeeding had lower rates of depression and anxiety, better sleep, and better overall well-being. There were still effects of sexual assault, but they were lessened. The most striking finding was for anger and irritability, which was dramatically lower for women who were exclusively breastfeeding. Indeed, the rates did not differ from the non-assaulted women. We concluded that exclusive breastfeeding did not eliminate the effects of trauma, but it lessened its effects for every variable. This effect was particularly striking for anger and irritability.



Kendall-Tackett et al., 2013, *Breastfeed Med*, 8(1), 1622

**Figure 3** Exclusive breastfeeding downregulates the stress response and attenuates anger and irritability in women with a history of sexual assault <sup>15</sup>.

### Lower Risk of Intergenerational Child Maltreatment

The second benefit is that breastfeeding lowers the risk that mothers will abuse or neglect their children. This is something that many abuse survivors worry about. They do not want to pass abuse on to the next generation. Strathearn et al. <sup>63</sup> conducted a 15-year longitudinal study that included 7,223 Australian mother-infant dyads. Within their sample, there were 500 child-protection documented cases of maternal-perpetrated physical abuse and neglect. They found that mothers who breastfed for at least 4 months were 3.8 times less likely to neglect their children and 2.6 times less likely to physically abuse them. The authors attributed their findings to breastfeeding's effects on oxytocin and increased mother-infant bonding. Oxytocin may have reduced risk of abuse was lowering the risk of anger and irritability <sup>15</sup>. Breastfeeding also lowers the risk of depression, which may make it easier for mothers to cope with the demands of an infant <sup>64-66</sup>. When mothers are depressed, breastfeeding protects their infants from the harmful effects of maternal depression <sup>67</sup>. The depressed breastfeeding mothers did not completely disengage from their babies but touched and looked at them more often.

This was enough to change their infants' EEG patterns to normal. In contrast, the infants of depressed non-breastfeeding had abnormal EEG patterns.

### Conclusions

Breastfeeding is often described as simply a way to feed a baby, but it is so much more. Breastfeeding is an integrated system that changes the physiology of mothers and babies. This provides protection, but physically and psychologically. Psychological trauma can negatively affect breastfeeding initiation and duration, but this negative effect is not inevitable. Indeed, many trauma survivors want to breastfeed.

While trauma survivors may face barriers to breastfeeding, breastfeeding's effects are particularly important for trauma survivors. Because it lowers the risk of intergenerational transmission of abuse, breastfeeding not only heals the current generation but generations to come. UNICEF's James Grant described the effect of breastfeeding this way. He was speaking about poverty, but his words are relevant to situations of trauma and adversity.

Breastfeeding is a natural "safety net" against the worst effects of poverty.

... exclusive breastfeeding goes a long way toward canceling out the health difference between being born into poverty and being born into affluence .... It is almost as if breastfeeding takes the infant out of poverty for those first few months in order to give the child a fairer start in life and compensate for the injustice of the world into which it was born <sup>68</sup>.

Breastfeeding also gives new mothers a fairer start, something that can be critically important, and encouraging to trauma survivors, for whom life has often not been fair. It helps them attach to their infants and gives them the hormonal support they need to cope with the demands of new motherhood.



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